

Advisory Board Quarterly Meeting Fourth Quarter FY07

Presented to
District Energy Advisory Board

August 16, 2007



Agenda

- 1. Call to Order
- 2. Review and Approval of Meeting Minutes for May 17, 2007
- 3. Review and Comparison of DES Unit Costs
- 4. Review of Operations Monitoring Reports
- 5. Natural Gas Purchasing Up-Date
- 6. Financial Report: 4th Quarter FY07
- 7. Status of Budget FY08
- 8. Capital Projects Review
- 9. Customer Contract Capacity Reviews
- 10. Other Board Member Items
- 11. Adjourn



1. Call to Order



2. Review and Approval of Meeting Minutes of May 17, 2007



3. Review and Comparison of DES Unit Costs

Summary Table 3A: FY07 & FY06
Unit Cost Comparison

Summary Table 3B: National Unit Cost Comparison



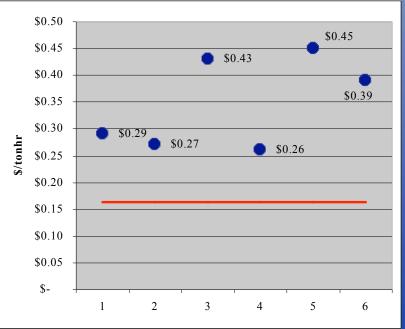
Summary Table 3A: FY07 & FY06 Unit Cost Comparison

	Steam			Chilled Water			
	((\$ per m lb)	(\$ per ton-hr)			
	FY06	FY07	% Diff.	FY06	FY07	% Diff.	
Private	\$26.37	\$25.86	-2.0%	\$0. 176	\$0.168	-4.8%	
State	\$24.73	\$27.75	10.3%	\$0.164	\$0.163	-0.6%	
Metro	\$29.23	\$27.68	-5.6%	\$0.183	\$0.156	-17.3%	
All ISC	\$27.11	\$26.43	-2.6%	\$0.161	\$0.155	-3.9%	
Aggregate	\$26.11	\$27.12	3.7%	\$0.177	\$0.163	-8.6%	



Summary Table 3B: National Unit Cost Comparison





Steam

Chilled Water



4. Review of Operations Monitoring Reports 4th Quarter FY07



Quarterly Monitoring Report Outline

1. Operations

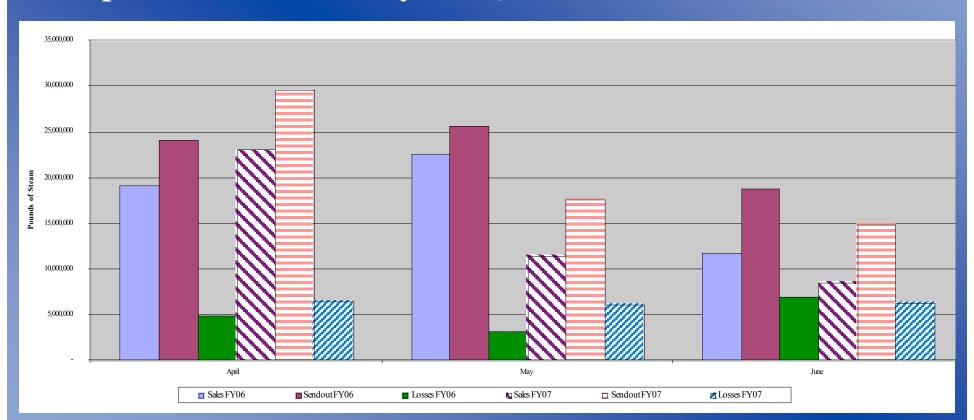
- Steam: Sales, Sendout, Losses and HDD
- Chilled Water: Sales, Sendout, Losses and CDD

2. Performance Measurement

- Steam: Fuel, Condensate Return, Electricity, Water
- Chilled Water: Electricity, Water
- 3. EGF Walkthrough
- 4. EDS Walkthrough



Operations Summary 4th Quarter FY07: Steam



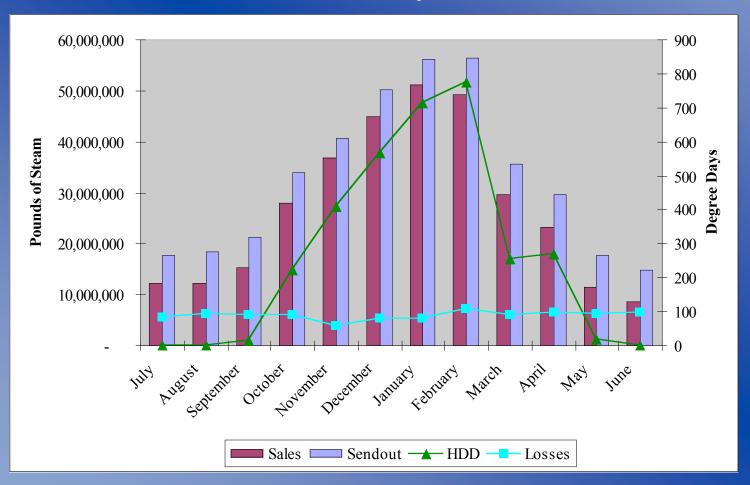


Operations Annual Summary FY07: Steam

	FY06	FY07	% Difference
Sales (Mlbs)	304,334	322,648	5.68%
Sendout (Mlbs)	354,779	392,839	9.69%
Losses (Mlbs)	50,445	70,191	28.13%
Peak (pph)	108,781	122,250	11.02%
Load Factor	37.23%	36.68%	-1.49%
HDD	3,322	3,241	-2.50%

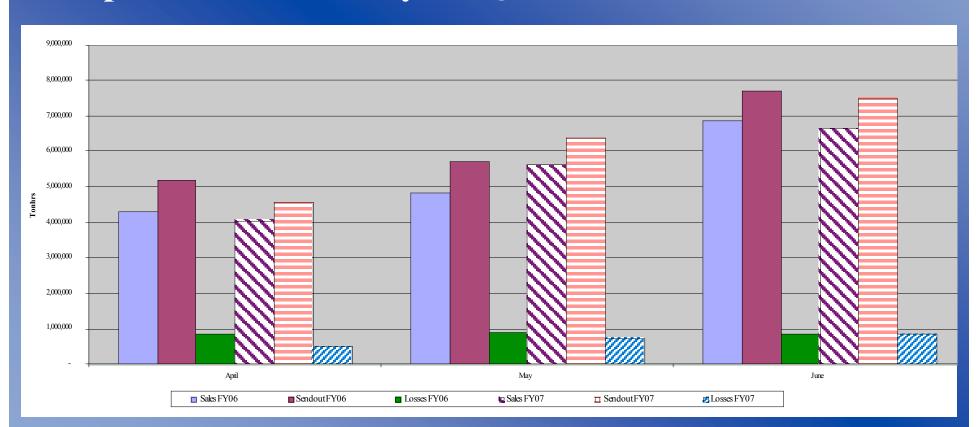


Operations Annual Summary FY07: Steam





Operations Summary 4th Quarter FY07: Chilled Water



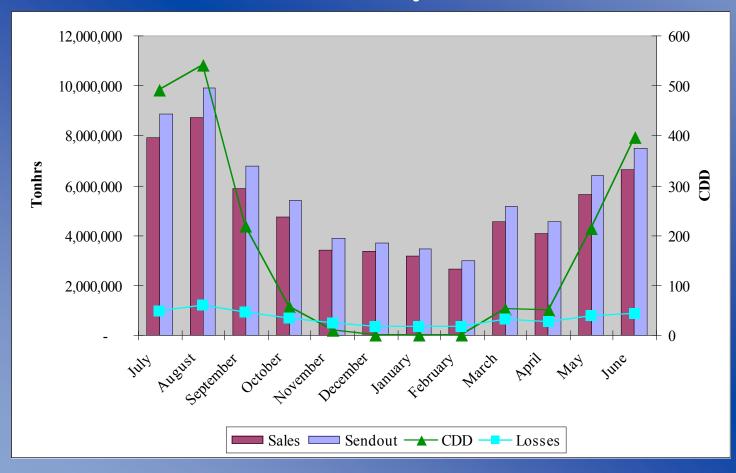


Operations Annual Summary FY07: Chilled Water

	FY06	FY07	% Difference
Sales (tonhrs)	52,304,033	60,720,304	13.86%
Sendout (tonhrs)	62,554,400	68,604,100	8.82%
Losses (tonhrs)	10,250,367	7,883,796	-30.02%
Peak (tons)	16,251	17,300	6.06%
Load Factor	43.94%	45.27%	2.93%
CDD	2,023	2,026	0.15%



Operations Annual Summary FY07: Chilled Water



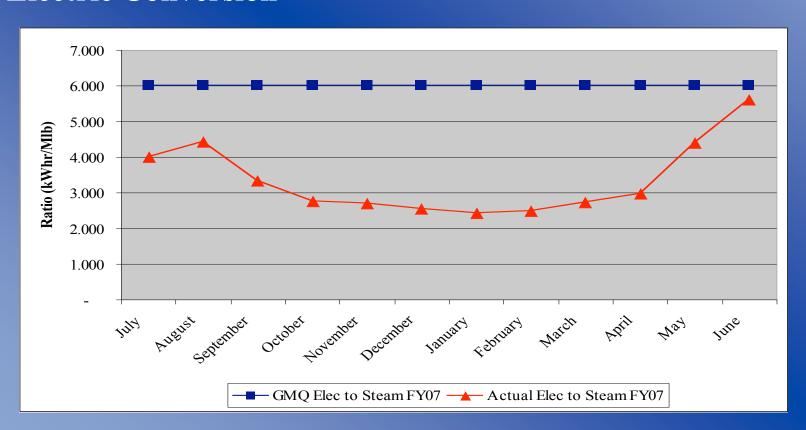


Performance Summary FY07: Steam

	4 th Qtr FY06	4 th Qtr FY07	% Diff	Total FY06	Total FY07	% Diff
GMQ Elec (kWhr/Mlb)	6.00	6.00		6.00	6.00	
Act Elec (kWhr/Mlb)	3.01	3.87	22.3%	2.91	2.91	0.0%
GMQ Fuel (Dth/Mlb)	1.778	1.774		1.778	1.778	
Act Fuel (Dth/Mlb)	1.461	1.410	-3.6%	1.459	1.451	-0.5%
GMQ Water (kgal)	9,675	6,554		49,838	53,148	
Act Water (kgal)	9,100	5,980	-52.2%	46,357	50,770	8.7%

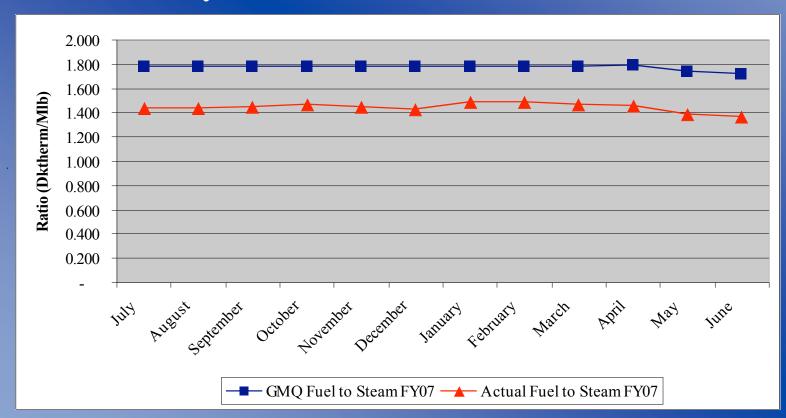


Performance Measurement FY07: Steam Electric Conversion





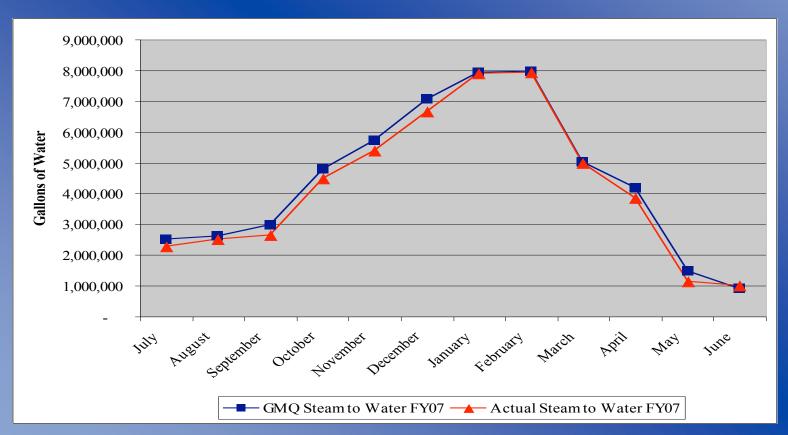
Performance Measurement FY07: Steam Plant Efficiency





Performance Measurement FY07: Steam

Water Conversion



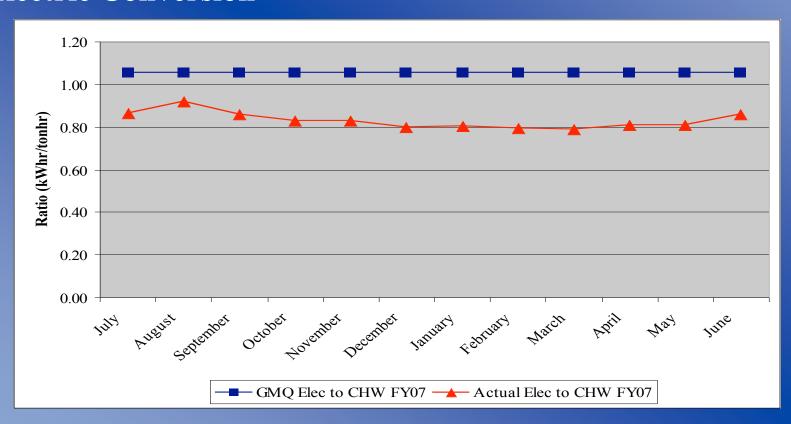


Performance Summary FY07: Chilled Water

	4 th Qtr FY06	4 th Qtr FY07	% Diff	Total FY06	Total FY07	% Diff
GMQ Elec (kWhr/tonhr)	1.055	1.055		1.055	1.055	
Act Elec (kWhr/tonhr)	0.847	0.831	-1.9%	0.905	0.843	-7.3%
GMQ Water (gal/tonhr)	5.25	5.25		5.25	5.25	
Act Water (gal/tonhr)	2.10	2.26	6.8%	2.13	2.09	-2.0%

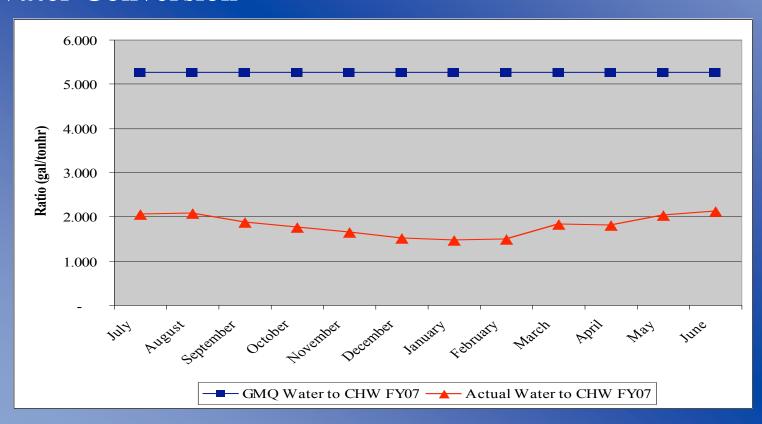


Performance Measurement FY07: Chilled Water Electric Conversion





Performance Measurement FY07: Chilled Water Water Conversion





EGF Walkthrough



Quarterly Inspection Process

- Log Book
- Housekeeping
- Boiler Shut-down
- Building Structure
- Safety Equipment
- Instrumentation and controls
- Building exterior and grounds



EDS Walkthrough



Quarterly Inspection Process

- Housekeeping
- Maintenance Items
- Safety Items



5. Natural Gas Purchasing Up-date

Natural Gas Purchasing Review

Table 5A: FY07 Gas Spending &
Budget Comparison

Table 5B: Projected Gas Costs for
FY08



Table 5A: FY07 Gas Spending & Budget Comparison

	Actual FY07	Budget FY07
Steam Sales (Mlbs)	322,648	358,770
Steam Sendout (Mlbs)	392,839	416,173
Fuel Use (Dth)	569,952	618,017
Plant Eff (Dth/Mlb)	1.451	1.485
Total Gas Cost	\$5,825,586	\$8,015,491
Unit Cost of Fuel (\$/Dth)	\$10.221	\$12.970



Table 5B - Projected Gas Costs for FY08

								NDESTa	rgeted Hedge Volumes	
	Estimated	Hedged		Current	Average	M arkedto	Actual Hedged	NDESTarget	% of ND ES	#Contracts to
	Consumption	Quantity	Hedge WAC OG	Market	Commodity	M arket Value	Per centage	Hedge	Tang et Volume	MeetNDES
	(Dth)	Dth	Price	Price	Price	(Loss)/Gain	Level	Per centage	U nhedged	Targ et
Jul-07	26,000	20,700	\$8.668	\$6.929	\$8.313	- \$35,993.16	80%	80%	0%	0.0100
Aug - 07	27,000	21,600	\$8.652	\$5.863	\$8.094	-\$60,246.72	80%	80%	0%	0.0000
Sep-07	34,000	27,300	\$8.689	\$5.949	\$8.149	-\$74,812.92	80%	80%	0%	0.0000
O ct- 07	48,000	38,600	\$8.673	\$6.128	\$8.175	- \$98,244.72	80%	80%	0%	0.0000
N ov-07	62,000	43,500	\$8.758	\$7.078	\$8.257	- \$73,088.70	70%	80%	10%	0.6100
D ec-07	81,000	48,300	\$8.894	\$8.028	\$8.544	- \$41,803.65	60%	80%	20%	1.6500
Jan-08	86,000	52,000	\$8.890	\$8.468	\$8.723	- \$21,928.40	60%	80%	20%	1.6800
Feb-08	72,000	42,900	\$8.888	\$8.488	\$8.726	-\$17,155.71	60%	80%	20%	1.4700
M ar-08	62,000	37,100	\$8.899	\$8.338	\$8.674	- \$20,820.52	60%	80%	20%	1.2500
Apr-08	50,000	20,100	\$8.818	\$7.713	\$8.157	-\$22,212.51	40%	80%	40%	1.9800
M ay-08	36,000	14,500	\$8.819	\$7.678	\$8.138	-\$16,543.05	40%	80%	40%	1.4300
Jun-08	28,000	11,100	\$8.832	\$7.768	\$8.190	-\$11,811.51	40%	80%	40%	1.1200
Summary	612,000	377,700	\$8.805	\$7.369	\$8.422	-\$494,661.57	63%	80%	17%	11.2000

The result of the conference call (06/25/07) was to increase the hedged amounts highlighted to the levels shown



6. Financial Reports: 4th Quarter FY07

			EV07 A stool	
Item		FY07 Budget	FY07 Actual	% of Budget
nem		r i 07 Buaget	Costs	% of Budget
FOC	Basic	\$3,659,463	\$3,659,463	100.00%
100	9th Chiller	\$34,289	\$34,290	100.00%
	C/O 6A	\$67,698	\$67,698	100.00%
	C/O 6B	\$59,267	\$56,230	94.87%
Chemicals	C/O 0B	\$132,870	\$152,008	114.40%
Engineering		\$53,788	\$132,000	0.00%
Insurance		\$32,632	\$39,883	122.22%
Marketing	- CES Sales Activity	\$30,000	\$21,544	71.81%
	- Metro Marketing	\$59,700	\$37,716	63.18%
	- Incentive Payments	\$28,528	\$28,415	99.60%
	- Metro Project Admin	\$61,300	\$0	0.00%
Metro Increr	nental Cost	\$592,100	\$654,023	110.46%
Water		\$693,918	\$532,910	76.80%
Natural Gas		\$8,015,491	\$5,567,840	69.46%
Electricity		\$4,318,594	\$3,892,522	90.13%
EDS Repair	& Improvement	\$161,363	\$11,729	5.19%
EDS Surchar	rge	\$64,438	incl.	
FEA	Steam		\$182,556	
	CHW		\$145,098	
	Subtotal - Operations	\$18,065,440	\$15,083,923	83.50%
Debt Service	2002 Bonds	\$4,299,502	\$4,299,500	100.00%
	2005 Bonds	\$637,838	\$637,838	100.00%
Oper. Reserve Funding Deposit		\$433,274	\$433,272	100.00%
	Total	\$23,436,054	\$20,454,533	87.28%
Revenue		\$21,153,871	\$18,642,753	88.13%
Metro Fundi	ng Amount	\$2,282,182	\$1,811,780	79.39%



7. Status of Budget FY08

FY08 Budget Review

Table 7A: FY08 Operating Budget

Table 7B: FY08 Capital Projects
Budget



Table 7A: FY08 Operating Budget

Item		FY07 Budget	FY08 Budget	% Change from FY07
FOC:	Basic	\$3,659,463	\$3,769,247	3.0%
	9th Chiller	\$34,289	\$35,318	3.0%
	C/O 6A	\$67,698	\$69,729	3.0%
	C/O 6B	\$59,267	\$61,045	3.0%
Chemicals		\$132,870	\$156,500	17.8%
Engineering		\$53,788	\$55,401	3.0%
Insurance		\$32,632	\$41,200	26.3%
Marketing:	CES Sales Activity	\$30,000	\$27,000	-10.0%
	Metro Marketing	\$59,700	\$53,730	-10.0%
	Incentive Payments	\$28,528	\$29,200	2.4%
	Project Administration	\$61,300	\$25,640	n/a
Metro Incren	nental Cost	\$592,100	\$617,560	4.3%
Water		\$693,918	\$681,640	-1.8%
Natural Gas/	Propane	\$8,015,491	\$7,099,510	-11.4%
Electricity		\$4,318,594	\$4,693,460	8.7%
EDS Repair	& Improvement	\$161,363	\$166,204	3.0%
EDS Surcha	rge	\$64,438	\$66,371	3.0%
	Subtotal - Operations	\$18,065,440	\$17,648,756	-2.3%
Debt Service	e 2002 Bonds	\$4,299,502	\$4,297,569	0.0%
	2005 Bonds	\$637,838	\$629,838	-1.3%
	FY07 Projects		\$227,769	n/a
Oper. Reserve Funding Deposit		\$433,274	\$191,460	-55.8%
	Subtotal - Capital	\$5,370,614	\$5,346,635	-0.4%
	Total	\$23,436,054	\$22,995,390	-1.9%



Table 7B: FY08 Capital Projects Budget

Description	Budget
MH 5 to MH 9 on 5 th Ave CR Replacement	\$550,000
MH 6 to MH 23 on Union St CR Replacement	\$550,000
Sheraton Hotel CR Replacement	\$150,000
Ryman Auditorium CR Replacement	\$150,000
State Steam Tunnel	\$325,000
Tunnel Lighting & Electrical Phase III	\$90,000
Temporary Boiler Connection at MH 15	\$93,500
MH and Tunnel Insl Repair & Replacement	\$100,000
Tunnel & MH Access Modifications	\$220,000
Exp Joint Replacement 4 th Ave Tunnel	\$20,000
PM, Contingency & EDS Upgrades	\$500,000
Total	\$2,748,500



8. Capital Projects Review

Financial Summary

Table 8A: Capital Projects Summary

Table 8B: Capital Project Detail



Table 8A: Capital Project Summary (6/30/07)

	Spent to End of 3rd Qtr	4 th Qtr Spending	Balance at End of 4 th Qtr
2002A Bond Projects	\$3,564,576	\$35,026	\$126,788
R&I Projects	\$116,879	\$9,342	\$282,723
2005B Bond Projects	\$7,373,649	\$45,244	\$768,119
2007 Bond Projects	\$31,822	\$1,947,806	\$878,872
Total	\$11,086,926	\$2,033,369	\$2,060,577



Table 8B: Capital Project Detail (6/30/07)

		Spent through	
	Budget	6/30/07	Remaining to Be Spent
2002A Projects			
Tennessee Towers Decoupling	\$1,350,422	\$1,223,634	\$126,788
Total Closed Projects	<u>\$2,377,281</u>	<u>\$2,377,281</u>	<u>\$0</u>
Total 2002A Projects	\$3,727,703	\$3,600,915	\$126,788
Repair/Improvement	\$353,463	\$126,221	\$282,723
2005B Projects			
Renaissance Re-piping	\$538,818	\$575,865	(\$37,047)
Customer Metering	\$1,676,439	\$1,675,826	\$614
Regions Cond Line Replacement	\$320,000	\$1,236	\$318,764
General and Admin	\$866,710	\$315,570	\$551,140
Total Closed Projects	<u>\$4,785,044</u>	<u>\$4,850,396</u>	(\$65,352)
Total 2005B Projects	\$8,187,011	\$7,418,893	\$768,119



Table 8B (cont'd): Capital Project Detail (6/30/07)

	Budget	Spent through 6/30/07	Remaining to Be Spent
2007 Projects			
MH 18 to L Steam/Cond Replacement	\$818,206	\$789,055	\$29,151
TN Tower Cond Line Replacement	\$317,031	\$254,777	\$62,754
MH 5 to 6 Cond Replacement	\$489,688	\$393,868	\$95,820
JK Polk Cond Line	\$413,123	\$385,018	\$28,105
Tunnel Lighting Ph II	\$152,551	\$0	\$152,551
General and Admin	\$484,152	\$0	\$484,152
<u>Total Closed Projects</u>	<u>\$183,749</u>	<u>\$157,411</u>	<u>\$26,338</u>
Total 2007 Projects	\$2,858,500	\$1,979,628	\$878,872



9. Customer Contract Capacity Reviews

- Most Customers Incurring TIFS
 - -21 in April 07
 - -21 in May 07
 - -20 in June 07
 - Same Customers Repeat
- Ryman Auditorium Steam Demand Excursion April 2007



10. Other Board Member Items



11. Adjourn